

【Claims】

1. A multi display device comprising:

panel housings having displays, the panel housings being foldable on each other, at least one side of the displays being disposed adjacent to each other when

5 the panel housings are unfolded; and

a key input part foldable on the panel housings.

2. The multi display device of claim 1 wherein a gearing device or an elastic device is used to unfold the key input part from the panel housings or unfold the panel housings from each other.

10 3. The multi display device of claim 1 wherein the panel housings are unfolded from each other when the key input part is unfolded from the panel housings.

4. The multi display device of claim 1 further comprising a first sub-display formed on an outer surface of one of the panel housings folded on the key input
15 part.

5. The multi display device of claim 1 further comprising a second sub-display formed on an inner surface of one of the panel housings unfolded from the key input part, the second sub-display being displayed an information by an input function provided on the key input part.

20 6. The multi display device of claim 5 wherein the second sub-display is

driven when the key input part is unfolded from the panel housings folded from each other.

7. The multi display device of claim 1 further comprising cover means for covering a side folding portion of the panel housings, the cover means being
5 provided on a side of the key input part where the a folding portion of the panel housings is mounted.

8. The multi display device of claim 1 further comprising an expanding part provided on the key input part, the expanding part being separately coupled on the key input part.

10 9. A multi display device comprising:

at least two panel housings with displays, the panel housings being foldable on each other, at least one side of the displays being disposed adjacent to each other when the panel housings are unfolded; and

a key input part insertable into a lower portion of the panel housings by a
15 sliding motion.

10. The multi display device of claim 9 wherein the sliding motion of the key input part synchronizes with a folding/unfolding operation of the panel housings.

11. The multi display device of claim 9 further comprising a sub-display
20 formed on an outer surface of the panel housing.

12. The multi display device of claim 9 wherein the key input part slides out when the panel housings are unfolded from each other.

13. The multi display device of claim 9 further comprising an expanding part separately coupled on the key input part.

5 14. The multi display device of claim 9 wherein the panel housings are overlapped on each other or spread from each other by a relative sliding motion, and when the panel housings are spread, at least one side of the displays are disposed adjacent to each other.

10 15. The multi display device of claim 9 wherein the panel housing are detachable coupled to each other, and when the panel housings are coupled to each other, at least one side of the displays are disposed adjacent to each other.

16. The multi display device of claim 9 further comprising a support for enhancing supporting force between the key input part and the panel housings when the key input part slides out of the panel housings.

15 17. The multi display device of claim 16 wherein the support is designed slide between the panel housings and the key input part or designed in more than two steps so that they can be overlapped.

18. A multi display device comprising:

20 at least two panel housings with displays, the panel housings being foldable on each other, at least one side of the displays being disposed adjacent to

each other when the panel housings are unfolded;

a key input part; and

means for moving the displays to a center of the key input part when the displays are sided to one side of the key input part when the key input part and the
5 displays are unfolded from each other.

19. The multi display device of claim 18 wherein the panel housings and the key input part are moved by a folding/ unfolding operation or a relative sliding motion.

20. The multi display device of claim 18 wherein the displays are folded
10 such that rear surfaces of the displays contact each other and designed to be adjacent to each other or separated from each other when the displays are unfolded.

21. A multi display device comprising:

at least two panel housings with displays, the panel housings being
15 foldable on each other, at least one side of the displays being disposed adjacent to each other when the panel housings are unfolded;

a key input part; and

a connection joint portion formed on a sidewall of the panel housing to which the displays adjacent or an adjacent portion of a frame to which the displays
20 adjacent so as to dispose the displays to be adjacent to each other.

22. The multi display device of claim 21 wherein the connection joint portion is opened.

23. The multi display device of claim 21 wherein a thickness of the connection joint portion is less than 0.5 mm.

5 24. The multi display device of claim 21 wherein a sidewall of the panel housings where the displays are adjacent to each other is cut away to defining a cutting portion and the displays are mounted on the upper end of the cutting portion.

10 25. The multi display device of claim 21 wherein after mounting the displays on the panel housings, a protecting cover is disposed to protect the connection joint portion of the panel housing and a front of a screen.

15 26. The multi display device of claim 25 wherein the protecting cover has a side protecting part for protecting the connection joint portion of the panel housings and a front protecting part for protecting the front of the screen, the side protecting part being thinner than the front protecting part.

27. The multi display device of claim 25 wherein a thickness of the side protecting part is less than 0.5 mm.